

§ 176.200

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compartment containing Class 1 (explosive) materials. The cofferdam must be constructed of wood or steel, formed by two tight athwartship bulkheads extending from the skin of the vessel to the overdeck. If the cofferdam extends to the weather deck, a watertight hatch must be fitted in the deck to provide access to the cofferdam.

(g) *Lighting.* Non-sparking, battery-powered, self-contained electric lanterns or non-sparking hand flashlights are the only means of artificial light authorized.

(h) *Living quarters.* Living quarters must be fitted on the inside with a non-combustible material approved by the Commandant, USCG. Bracketed ship's lamps are the only lighting fixtures authorized to be used in the living quarters. Any stove used for heating or cooking must be securely fastened and may not be mounted closer than 15 cm (5.9 inches) to the deck or sides of the house. Any smoke pipe for the stove which passes through the roof of the house must be kept at least 8 cm (3 inches) away from any woodwork. Each smoke pipe must be protected by a layer of non-combustible material approved by the Commandant, USCG, an air space of at least 2.54 cm (1 inch), and a metal collar of at least 1.5 mm (0.059 inch) sheet secured only on the weather side of the roof. There may be no opening from any living quarters into any stowage compartment.

(i) *Storage of other hazardous materials.* Magazine vessels having Class 1 (explosive) materials on board may not be used for the storage of any other hazardous material.

(j) *Magazine vessel's stores.* Hazardous materials used as stores on board any magazine vessel must comply with the requirements of 46 CFR part 147.

(k) *Matches.* Safety matches requiring a prepared surface for ignition are the only type of matches authorized to be possessed or used on board a magazine vessel. They must be kept in a metal box or can with a metal cover and stored in the custodian's living quarters.

(l) *Firearms.* Firearms and ammunition (other than cargo) are not permitted on board a magazine vessel.

(m) *Fire extinguishing equipment.* No Class 1 (explosive) materials may be

loaded or stowed in, unloaded from, or handled on any magazine vessel unless four fire extinguishers that meet the requirements for Type A Size II or Type B Size III in 46 CFR part 95, subpart 95.50 are near and accessible to the magazines.

(n) *Supervision.* A magazine vessel containing Class 1 (explosive) materials must be continuously attended by a custodian employed for that purpose by the vessel's owner.

(o) *Unauthorized persons on magazine vessels.* The custodian of a magazine vessel shall prevent unauthorized persons from coming on board unless it is necessary to abate a hazard to human life or a substantial hazard to property.

(p) *Repacking of Class 1 (explosive) materials on board.* No Class 1 (explosive) materials may be repacked on board a magazine vessel. Broken or damaged packages must be handled in accordance with the requirements of §176.156. Packages requiring an emergency response must be handled in accordance with the emergency response information required under §172.602 of this subchapter.

(q) *Work boat.* Each magazine vessel must be equipped with a work boat.

(r) *Life preservers.* One approved personal flotation device must be available for each person employed on a magazine vessel.

(s) *Fenders.* Each magazine vessel must be fitted with fenders in sufficient number and size to prevent any vessel tying up alongside from coming in contact with the hull.

[Amdt. 176–30, 55 FR 52696, Dec. 21, 1990, as amended by Amdt. 176–41, 61 FR 51339, Oct. 1, 1996; 66 FR 45185, 45384, 45385, Aug. 28, 2001]

Subpart H—Detailed Requirements for Class 2 (Compressed Gas) Materials

SOURCE: Amdt. 176–30, 55 FR 52704, Dec. 21, 1990, unless otherwise noted.

§ 176.200 General stowage requirements.

(a) Each package of Class 2 (compressed gas) material being transported by vessel must be prevented from making direct contact with the vessel's

deck, side, or bulwark by dunnage, shoring, or other effective means.

(b) When cylinders of Class 2 (compressed gas) materials being transported by vessel are stowed in a horizontal position, each tier must be stowed in the cantlines of the tier below it, and the valves on cylinders in adjacent tiers must be at alternate ends of the stow. Each tier may be stepped back and the ends alternated in order to clear the flange. Lashing must be provided to prevent any movement.

(c) When cylinders of Class 2 (compressed gas) materials being transported by vessel are stowed in a vertical position they must be stowed upright in a block and cribbed or boxed in with suitable dunnage. The box or crib must be dunnaged at least 10 cm (3.9 inches) off any metal deck. The cylinders in the box or crib must be braced to prevent any movement. The box or crib must be securely chocked and lashed to prevent any movement.

(d) Any package containing Division 2.3 (poison gas) materials must be stowed separate from all foodstuffs.

(e) Class 2 (compressed gas) materials may not be stowed "on deck" over a hold or compartment containing coal.

(f) Class 2 (compressed gas) material must be kept as cool as practicable and be stowed away from all sources of heat and ignition.

§ 176.205 Under deck stowage requirements.

(a) When a Class 2 (compressed gas) material is stowed below deck, it must be stowed in a mechanically ventilated cargo space with no source of artificial heat and clear of living quarters. No bulkhead or deck of that hold or compartment may be a common boundary with any boiler room, engine room, coal bunker, galley or boiler room up-take.

(b) When Division 2.1 (flammable gas) materials are stowed below deck, they must be stowed in a hold or compartment which complies with paragraph (a) of this section and the following requirements:

(1) Each hold or compartment must be ventilated.

(2) Each hold or compartment must be equipped with an overhead water

sprinkler system or fixed fire extinguishing system.

(3) Each electrical power line in the hold or compartment must be protected by a strong metal covering to prevent crushing by cargo being stowed against it.

(4) Except when fitted with electrical fixtures of the explosion-proof type, each electrical circuit serving the hold or compartment must be disconnected from all sources of power. No circuit may be energized until the Division 2.1 (flammable gas) cargo and any vapors have been removed from the hold or compartment. Explosion-proof portable lighting may be used if the source of power is from electrical outlets outside the hold or compartment and above the weather deck.

(5) Any opening in a common bulkhead of an adjacent hold or compartment must be securely closed off and made gas-tight, unless the adjacent hold or compartment is also used for the stowage of Division 2.1 (flammable gas) materials.

(6) Full and efficient hatch covers must be used. Tarpaulins, if fitted, must be protected by dunnaging before overstowing with any cargo. Each tarpaulin must be in one piece and free of rents, tears, and holes.

(7) A fire screen must be fitted at the weather end of each vent duct leading from the hold or compartment. The fire screen must completely cover the open area. It must consist of two layers of corrosion-resistant metal wire of 20×20 mesh or finer, spaced not less than 1 cm (0.4 inch) or more than 4 cm (1.6 inches) apart. The screen may be removable if means for securing it in place when in service are provided.

(8) The hold or compartment may not be fitted with any gooseneck type vent trunk head.

(9) Any electrical apparatus located in the hold or compartment must be capable of being disconnected from its power source by a positive means located outside the hold or compartment.

[Amdt. 176-30, 55 FR 52704, Dec. 21, 1990, as amended at 56 FR 66282, Dec. 20, 1991]

§ 176.210 On deck stowage requirements.

Cylinders of Class 2 (compressed gas) materials being transported by vessel